

19980921.qrp v01_n221.qrs.980921

Date: Mon, 21 Sep 1998 19:03:16 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1221

QRP-L Digest 1221

Topics covered in this issue include:

- 1) [20579] Re: PVC, ETC.
by Clay N4AOX <wyn@worldnet.att.net>
- 2) [20580] History of Freq. Control Quartz Crystals
by Clay N4AOX <wyn@worldnet.att.net>
- 3) [20581] Re: History of Fre (oops)
by Clay N4AOX <wyn@worldnet.att.net>
- 4) [20582] Qrp rigs sold
by "Jerry W. O'Dell" <jwodel@ameritech.net>
- 5) [20583] QRP AField 1998 from DM65qu
by jaywa5whn@juno.com (Jay D Miller)
- 6) [20584] RE: QRP Items For Sale
by Jeff Grudin <grudin@pacific.vdbs.com>
- 7) [20585] Re: History of Freq. Control Quartz Crystals
by hsilver@pyx.net
- 8) [20586] Re: QRP SSB freq?
by Joe Everhart <n2cx@voicenet.com>
- 9) [20587] For sale: tuners, HF, scanners, QRP, HT, 2m mobiles, misc.
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 10) [20588] WD8RIF QRP Afield Report
by William McFadden <wmcfadde@oucsace.cs.ohiou.edu>
- 11) [20589] Re: qrp rigs 4 sale
by Fran Flynn <fflynn@together.net>
- 12) [20590] How do you cut copper clad PC board?
by Bob Painter <turnkey@exo.com>
- 13) [20591] Re: How do you cut copper clad PC board?
by Bob Hightower <ki7mn@dancris.com>
- 14) [20592] Re: QRP SSB freq?
by "Kevin F. Glynn" <kfglynn@prodigy.net>
- 15) [20593] FMLA: Frank@W.A.R.
by mnhopkins@juno.com (Michael N Hopkins)
- 16) [20594] daytona florida hamfest
by THE ONE AND ONLY <mitch96@pobox.com>
- 17) [20595] Not QRP:NYC Marathon Question
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 18) [20596] RE: How do you cut copper clad PC board?
by Tracy@bytemark.com (Tracy)
- 19) [20597] RE: RX Noise Bridges - Did you know...

- by aweiss@usd.edu (A. Weiss)
- 20) [20598] Re: 10 Mtr AM Repeater
by Patrick Cook <kb0oxd@qsl.net>
 - 21) [20599] Re HW-8 cores
by mike czuhajewski <wa8mcq@erols.com>
 - 22) [20600] Re: Am audio (overmod)
by RABRUNER@aol.com
 - 23) [20601] Re: suppressed carrier FM
by RABRUNER@aol.com
 - 24) [20602] MFJ Reflector, Found!
by MJC191@aol.com
 - 25) [20603] RIT Range?
by Dave Fifield <fifield@pacbell.net>
 - 26) [20604] Re: How do you cut copper clad PC board?
by "Dennis Payton" <dpayton@fwi.com>
 - 27) [20605] Book to read while waiting for K2
by Peter_Simpson@ne.3com.com
 - 28) [20606] Re: suppressed carrier FM
by "W. Kimura" <w.kimura@valley.net>
 - 29) [20607] F/S QRP Gear
by SABorns@aol.com
 - 30) [20608] Re: Solar Stuff for QRP AFIELD
by "Edward A Kwik jr" <eakwikjr@hti.com>
 - 31) [20609] Re: qrp rigs 4 sale
by "Armin Hachmer" <armin@muskoka.com>
 - 32) [20610] QRp/mobile and Yaesu 900AT
by "Jeff M. Gold" <JGold@tntech.edu>
 - 33) [20611] The SAC contest & many small boxes of stuff
by nilsbull@juno.com (Nils R Young)
 - 34) [20612] Novice Fox Hunt Tails
by Brad Mugleston <bmug@gwl.com>
 - 35) [20613] number for Alpha Delta
by Scott Howell <whowell@hq.nasa.gov>
 - 36) [20614] Norcal 40A/KC1/Speaker 4 sale
by "Jeff M. Gold" <JGold@tntech.edu>
 - 37) [20615] Wacky Skip
by "DJ Rock" <b2bn@hotmail.com>
 - 38) [20616] WV Rocket Boy
by Blackpug1@aol.com
 - 39) [20617] 'QRP Afield'- Reporting
by "Edward A Kwik jr" <eakwikjr@hti.com>
 - 40) [20618] TNX!! W6ZH es N7VE, the SWR bridge is amazing! (long)
by Chris Cartwright <ccart@dns.vidtel.com>
 - 41) [20619] RE: Wacky Skip
by "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
 - 42) [20620] WIAW PROPAGATION RPT
by ARDUJENSKI@aol.com
 - 43) [20621] QRP Afield / Yosemite backpack report

by "Allan (Grant) Taylor" <k7gt@qsl.net>
44) [20622] Re: Book to read while waiting for K2
by Stephen Lee <slee@u.washington.edu>
45) [20623] Re: How do you cut copper clad PC board?
by Steven Weber <kd1jv@moose.ncia.net>
46) [20624] QRP Afield Report--N6WG/QRPP
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
47) [20625] Re: QRP Afield / Yosemite backpack report
by "Marshall Emm" <mgemm@mtechnologies.com>
48) [20626] FS:TenTec Argosy II and accessories
by Ronald_A_Pfeiffer@res.raytheon.com
49) [20627] Re: Radio Shack DX394 closeout
by "Michael A. Gipe" <mgipe@reliablemeters.com>
50) [20628] Thermophotovoltaic power
by Steven Weber <kd1jv@moose.ncia.net>
51) [20629] Hi-Mound BK100 bug for sale
by Scott Howell <whowell@hq.nasa.gov>
52) [20630] Elmer 101 Series in QRPP
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
53) [20631] Bandwidth (was: re: AM Audio)
by "laura halliday" <marsgal42@hotmail.com>
54) [20632] Re: Bandwidth (was: re: AM Audio)
by Chris Trask <ctrask@primenet.com>
55) [20633] PacifiCon '98
by DENNISMO@aol.com
56) [20634] Re: Am audio (overmod)
by "Karl Kanalz - Dallas" <kkanalz@optelinc.com>
57) [20635] RE: PVC, Sideband FM, Narrow FM, and the Heath Dipper er
by "Karl Kanalz - Dallas" <kkanalz@optelinc.com>
58) [20636] Solar contamination
by Al Gritzmacher <ae2t@bigfoot.com>
59) [20637] Knightlites Website
by "Bob Kellogg" <ae4ic@nr.infi.net>
60) [20638] HC49 crystals wanted:(1) 11.046 and (2 or so) ~11.030 MHz
by "Allan (Grant) Taylor" <k7gt@qsl.net>
61) [20639] Re: QRP Afield Report--N6WG/QRPP
by tom whalen <whalen@swcp.com>
62) [20640] Re: Am audio (overmod)
by KC5TJA <kc5tja@axisinternet.com>
63) [20641] FS Heathkit HW-7
by Guy Dragoo <GDRAG@proedge.com>
64) [20642] FS: SEVERAL ITEMS
by w2bj@juno.com (Barry J Minsky)
65) [20643] Re: Pacificon '98 - Sheraton room availability info
by Jim Lowman <jmlowman@ix.netcom.com>
66) [20644] Re: Am audio (overmod)
by BADDBadger@aol.com

Date: Sun, 20 Sep 1998 19:19:04 -0400
From: Clay N4AOX <wyn@worldnet.att.net>
To: jamesd1@flash.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [20579] Re: PVC, ETC.
Message-ID: <36058D68.4EF2@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Killer Kid Megacycle wrote:

>
> On pages 24.32 and 24.33 (1998 edition of course) is a table entitled
> "Properties of Common Thermoplastics". Rigid PVC is listed, as is
> flexible. Rigid PVC has a dissipation factor (a measure of loss in the
> material, and hence it's suitability as a low loss insulator) of 0.009 to
> 0.017. Lower is better. Flexible is 0.07 to 0.16, which is why Zip cord
> is lossy when used as a transmission line. How does this compare to other
> plastics commonly suggested as alternatives to PVC??
>
> Nylon has listed dissipation factors of 0.02 to 0.03, Phenolic as 0.025
> to 0.10, high density polyethylene as 0.0003, and polystyrene as 0.0001
> to 0.0003. So PVC's dissipation factor falls right in the middle of
> other recommended "good electrical insulators".
>

Sorry, but I could not resist the urge to jump in here. Having worked
in the confusing world of plastic material applications for a few years,
I was somewhat jarred when I read the above info. I quickly ran to the
ARRL Hand Book and sure enough there it was: Phenolic was on the list of
"..Common Thermoplastics"

There are two basic families of plastics: Thermoplastics and
Thermosets.

Thermoplastics: soft and pliable when heated without any change of
inherent properties (when cooled).

Thermosets: becomes hard and unmoldable when heated and is resistant to
additional heat once it is set.

Thermosets are the oldest of the two classes. Some commercial products
were Melamine, Formica, Micarta, Bakelite, etc. *Phenolics* belong to
the Thermoset class.

(See <http://me.mit.edu/2.01/Taxonomy/html/Materials.html>)

Thermoplastics are notoriously subject to cold flow or creep or time-dependent plastic deflection under moderate stress, even at temperatures well below the liquid transition point. Polyamide or Nylon is probably the best common thermoplastic material for structural stability at elevated temperature. In looking at the other materials in the ARRL table, I am not sure about Polyphenylene Sulfide, but the rest appear to be true thermoplastics. Phenolic is not.

Thermoplastic material structural stability can be enhanced by the addition of glass fibers or other fillers in the melt. Ol' Sol and his UV are the enemy of all plastics. Outdoor stuff should have UV inhibitors such as carbon black. Never use polypropylene "ski rope" for outdoor guying.

72/73,
Clay N4AOX

Date: Sun, 20 Sep 1998 19:25:53 -0400
From: Clay N4AOX <wyn@worldnet.att.net>
To: qrp-l@Lehigh.EDU
Subject: [20580] History of Freq. Control Quartz Crystals
Message-ID: <36058F01.2801@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Whilst surfing, I ran across this item, I thought might be interesting to the group here.

"A History of the Quartz Crystal Industry in the USA"

http://bul.eecs.umich.edu/uffc/fc_procdgs.html

72/73,
Clay N4AOX

Date: Sun, 20 Sep 1998 19:42:44 -0400
From: Clay N4AOX <wyn@worldnet.att.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [20581] Re: History of Fre (oops)

Message-ID: <360592F4.3844@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Clay N4A0X wrote:

>
> Whilst surfing, I ran across this item, I thought might be interesting
> to the group here.
>
> "A History of the Quartz Crystal Industry in the USA"
>
> http://bul.eecs.umich.edu/uffc/fc_procdgs.html
>

Well that did not work so try:

http://bul.eecs.umich.edu/uffc/fc_history/bottom.html

72/73,
Clay N4A0X

Date: Sun, 20 Sep 1998 19:44:18 -0400
From: "Jerry W. O'Dell" <jwodell@ameritech.net>
To: qrp-l@Lehigh.EDU
Subject: [20582] Qrp rigs sold
Message-ID: <19980921004345.RIN8627@[206.141.209.192]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

The SST and Green Mountain have been sold. Poor
old Oak Hills will probably be around. I may build
something else in the box!

Thanks to all.

73 jerry w8gnd

Date: Sun, 20 Sep 1998 17:48:33 -0600

From: jaywa5whn@juno.com (Jay D Miller)
To: qrp-l@Lehigh.EDU
Cc: bensondj@aol.com
Subject: [20583] QRP AField 1998 from DM65qu
Message-ID: <19980920.174838.2710.0.JayWA5WHN@juno.com>

WOW! 10 meters was wide open {Sat. & Sun}. Our first indication was New England, and the NYC area were full quieting on 29.6 MHz FM into DM65 {W5BI/rptr}. Central America was fulling quieting too. Even 52.525 MHz FM simplex was open.

Wx was cool & clear. I had set up the station, on a large rock overlooking a cliff.

I only had 1.5 hours to play in this contest. 1 watt {Sierra xcvr, N6KR design, back up was NW20 xcvr, W6EMT design} on 20 cw feeding a sloper, pointed NE. The panoramic scenic view was worth the hike up the side of the mountain in DM65qu {Jemez Mountains, at 8,665 feet asl}. Fall colors were beautiful at 11,600 feet asl. Interesting callsigns worked, W0UFO & WW5XX. N5TW, great 900 milliwatt signal. N4ROA, tnx for hanging in there between the AMTOR bursts. The same with NN1G, tnx Dave. N6MM/mobile with 3 watts, nice signal Harvey. Lots of FISTS, QCWA, Western Washington DX Association contestants on. 20 meters cw was crowded.

My total was 15 contacts, and I had enjoyed every minute of it. Tnx NN1G for managing this year's event.

72...Jay, WA5WHN DM65qd

Albuquerque, NM USA

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Date: Sun, 20 Sep 1998 16:44:40 -0700
From: Jeff Grudin <grudin@pacific.vdbs.com>
To: QRP-L <qrp-l@lehigh.edu>
Subject: [20584] RE: QRP Items For Sale
Message-ID: <36059368.3CF6B5BC@vdbs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

The RS DSP, 38S, and DSP-9 are all gone.

Thanks to everyone for your interest. Sorry I didn't have one for everyone that wanted one.

--

73 de AC6KW <mailto:grudin@vdbbs.com>
Jeff Grudin, DVM Web Add: <http://www.vdbbs.com/~grudin>
Ocean Animal Clinic / Cat Clinic of Santa Cruz - Santa Cruz, California
Norcal QRP #1292 QRP-L #16 ARS #351 AR Qrp #131

Date: Sun, 20 Sep 1998 19:55:27 -0400 (EDT)
From: hsilver@pyx.net
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [20585] Re: History of Freq. Control Quartz Crystals
Message-ID: <Pine.LNX.3.95.980920195332.14979A-100000@matrix.pyx.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sun, 20 Sep 1998, Clay N4A0X wrote:

> Whilst surfing, I ran across this item, I thought might be interesting
> to the group here.
>
> "A History of the Quartz Crystal Industry in the USA"
>
> http://bul.eecs.umich.edu/uffc/fc_procdgs.html
>
> 72/73,
> Clay N4A0X

By any chance did you come across an online source of how one can grow their own frequency control crystals ? Is such a thing possible ?

Harley Silver

Date: Sun, 20 Sep 1998 20:34:06 -0400
From: Joe Everhart <n2cx@voicenet.com>
To: qrp-l@Lehigh.EDU

Cc: njqrp@njqrp.org
Subject: [20586] Re: QRP SSB freq?
Message-ID: <199809210034.UAA55248@nss4.cc.Lehigh.EDU>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

Wow a bunch of answers about which freq to use! Several to the list and a bunch more privately.

A zillion thanks to all who passed along advice!

For our hamfest NJQRP station, we ended up just cruising the band since activity was so low. Will post the results in a separate message.

72/73,

Joe E., N2CX

from South Jersey y'all!

Date: Sun, 20 Sep 1998 21:06:19 -0400 (EDT)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@lehigh.edu>, eax@w3eax.umd.edu, forsale-swap@qth.net, Laurel ARC <larc-l@webtrek.com>
Subject: [20587] For sale: tuners, HF, scanners, QRP, HT, 2m mobiles, misc.
Message-ID: <Pine.LNX.3.95.980920210504.16088A-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Someone had commented I hadn't posted in a while...it's been a BUSY summer in non-radio-related stuff. Time to purge the closets for winter! Most of these goodies are mine, others belong to friends.

S&S Engineering ARK20, 20m QRP CW rig. Internal speaker,
0-7 watts variable output w/factory modification,
keyer, audio filter, pushbutton tuning, heavy gauge
aluminum case. Checked over by manufacturer.
With manual, tilt bail/carry handle, exc. \$240

Oak Hills 100 40m xcvr, var. BW filter w/manual, mint
\$100

Oak Hills Classic 20/40m xcvr, keyer, manual, a few scuffs

\$175	
Ten-Tec 1340 40m QRP xcvr, built, manual, mint	\$95
Heath SB-1400 gen. cov. HF xcvr, FM unit, manual, CW filter, matching 20A power supply/speaker, exc.	
\$650	
Radio Shack 2m 30w amplifier, manual, exc. condition	
\$40	
Radio Shack 2m 30w amplifier, w/box & manual, mint	\$50
Mirage BD-35 144/440 amp, 45/35w, box & manual, mint	
\$125	
RS HTX-212 2m mobile w/mic, manual, bracket, exc.	\$160
RS HTX-212 2m mobile w/box, mic, bracket, manual, mint	
\$175	
RS HTX-242 2m mobile w/box, mic, bracket, manual, mint	
\$200	
Yaesu FT-470 dual band 144/440 HT, 1200 mAh 7.2v battery, battery, antenna, wall charger, manual, exc.	\$230
RS Pro-51 handheld scan, no cell, box & manual, mint	
\$150	
RS Pro-2039 mobile scan, no cell, box & manual, mint	
\$150	
Nye Viking MBV-A 5 kW antenna tuner w/switches, meters, open wire, two coaxes, a few scratches, \$850 new	\$500
Heathkit SA-2040 roller-inductor tuner, manual, no meter, vg	
\$120	
MFJ-264 1.5 kW HF-UHF dry dummy load, exc.	\$48
AEA PK-96 1200/9600 baud packet controller w/manual, cables, excellent condition	\$120
Nye Viking Low Pass filter, HF with UHF connectors. Cylindrical in shape, exc. cond.	\$24
Heathkit HD-15 hybrid phone patch with manual	\$40
Radio Shack 1.3 GHz handheld frequency counter, exc.	
\$65	
Eico 667 tube & transistor checker	\$90
Heath TC-2 tube checker	\$25
Ramsey COM-3 service monitor w/0.5 ppm time base, pager decode, cover and carrying handle. Signal generator, 0-1000 MHz with deviation and center freq. meter, 1 kHz injectable tone, more. With manual, exc. cond., about \$4000 new	\$2400
KD1JV SA/SA spectrum analyzer scope adaptor, built by WJ2V in tan/black case w/power supply, exc. cond. w/manual I have a scope but haven't had any time to use this	\$150

Mitsubishi DA-F158 electronic digital stereo tuner, v. good
\$15

Offers considered. Ridiculous offers may be answered with laughter :)

Scott Rosenfeld ARS NF3I
301-549-1022 (h) 301-982-1015 (w)
Burtonsville, MD
ham@w3eax.umd.edu <http://w3eax.umd.edu/~ham>

Date: Sun, 20 Sep 1998 21:02:58 -0400 (EDT)
From: William McFadden <wmcfadde@oucsace.cs.ohiou.edu>
To: qrp-1@Lehigh.EDU (qrp-1)
Subject: [20588] WD8RIF QRP Afield Report
Message-ID: <199809210102.VAA20195@oucsace.cs.ohiou.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I participated during the last three hours of the QRP Afield from Highland Park in Athens, Ohio. I was joined by Drew McDaniel, W8MHV/9M2MC, and Mike Hansgen, AA8EB, although neither Drew nor Mike operated this event.

I arrived on-site about 5pm and quickly erected the W3EDP and set up the QRP Station in a Bag. I didn't try hard to make QSOs, but instead used this event as a chance to continue experimenting with the W3EDP antenna and the recently-built ScQRPions "N7VE LED SWR Indicator". Nevertheless, over about two hours, I made ten QSOs on 15, 20, and 40 meters. The W3EDP performed well and tuned easily on these bands, but failed to tune on 80 meters. The N7VE indicator worked well on 15 and 20 meters but was found to be useless on 40 meters because of the metal cabinet of the MFJ-901B, into which I'd installed the indicator.

Despite the problems found with the W3EDP and my implementation of the N7VE SWR Indicator, this was a very fun event, and I look forward to next year!

Score : (10 QS0)
x (4 points/QS0)
x (2 pwr multiplier)
x (7 SPC)

560 points

Station:

Index Labs QRP+ at 5 watt
10Ah gel cell
Idiom Press Super CMOS II keyer
Whiterook paddle
W3EDP antenna

--

W. Eric McFadden WD8RIF Athens OH
wd8rif@qsl.net
<http://www.qsl.net/wd8rif>

Date: Sun, 20 Sep 1998 21:03:45 -0400 (EDT)
From: Fran Flynn <fflynn@together.net>
To: qrp-l@Lehigh.EDU
Subject: [20589] Re: qrp rigs 4 sale
Message-ID: <199809210103.VAA13185@sequoia.together.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

<<<<<
From: "Jerry W. O'Dell" <jwodel@ameritech.net>
To: qrp-l@lehigh.edu
Subject: [20556] qrp rigs for sale
Message-ID: <19980920142754.CXQ8627@[199.179.189.252]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have the following rigs I never use for sale. All are \$60 each.
Dicker about the price and I won't answer. All worked last time I tried
them.

(1) Wilderness SST -- cute little guy, but after a while the
novelty of showing it to people at club meetings wears off.

Wilderness case.

>>>>

You're email address does not seem to work.

I was wondering what band the SST was set up for? I have the 40 meter version.

Thanks,

Fran, KM1Z

Date: Sun, 20 Sep 1998 18:51:33 -0700
From: Bob Painter <turnkey@exo.com>
To: qrp-l@Lehigh.EDU
Subject: [20590] How do you cut copper clad PC board?
Message-ID: <199809210140.SAA02003@ns1.snni.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi gang,
What is a good way to cut copper clad PC board (to use
in making an enclosure for an attenuator)?

Normal hack saw blades get dull real fast. A cut off wheel
in a dremel toll is slow. I don't have a sheet metal shear to use.

Thanks for your help,
73, Bob Painter, KF6NKH

Date: Sun, 20 Sep 1998 19:10:16 +0000
From: Bob Hightower <ki7mn@dancris.com>
To: turnkey@exo.com
Cc: qrp-l@Lehigh.EDU
Subject: [20591] Re: How do you cut copper clad PC board?
Message-ID: <199809210202.TAA00518@user2.dancris.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 06:51 PM 9/20/98 -0700, you wrote:

>Hi gang,

>What is a good way to cut copper clad PC board (to use
>in making an enclosure for an attenuator)?
>
>Normal hack saw blades get dull real fast. A cut off wheel
>in a dremel toll is slow. I don't have a sheet metal shear to use.
>

I use an old paper cutter, the kind with the table and a large blade that shears the board. The blade can be re-sharpened with a fine file when needed.
Bob Hightower KI7MN <http://www.dancris.com/~ki7mn>

Date: Sun, 20 Sep 1998 22:30:36 -0400
From: "Kevin F. Glynn" <kfglynn@prodigy.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [20592] Re: QRP SSB freq?
Message-ID: <199809210230.WAA09912@pimout4-int.prodigy.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi Joe and gang,

I listened for you guys yesterday morning, but was bombarded (pun intended) by the Air Force QSO Party.

Back in April Tony WW2W, Ed WA2HQA and myself operated a portable QRP special event station under the call sign N2Y from Brooklyn and operated around 14.270, but had much greater success calling CQ special event and holding a frequency on 40M at 7.265. Good run of DX on 20M, and it definitely paid to move around the band working our way up from 14.150. 40M was fun earlier in the morning and early afternoon during those weekends. Worked CW too, but it was nice to hear good reports on SSB as well.

72 Kevin N2TO
Brooklyn, NYC
kfglynn@prodigy.net

Date: Sun, 20 Sep 1998 21:33:51 -0700
From: mnhopkins@juno.com (Michael N Hopkins)
To: Boatanchors@theporch.com
Cc: Glowbugs@piobarie.mines.uidaho.edu, 50mhz@qth.net, QRP-L@Lehigh.EDU
Subject: [20593] FMLA: Frank@W.A.R.
Message-ID: <19980920.213402.-81627.0.MNHopkins@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I got enough of Interstate 30 in my 15 1/2 hour Dayton-to-Dallas drive, so I took one of Texas' farm-to-market roads back from Greenville and my relatives. It was then I saw Frank, or more particularly his brown Frazier parked with some Toyota SUVs in a pasture.

I stopped. Sure, Frank is a nutso who thinks he leads a Five Meter Liberation Army that is going to take back 56-60 mc when the FCC moves TV up, but at least he is interested in radio. My relatives are only interested in indictments, and avoiding them. I did not believe there really was a FMLA, anyway; or if there was, that there were any soldiers in it, so I was surprised when, at the cattle guard, I was greeted by one.

He was a pale, thin guy with short hair, fatigue trousers and a camo muscle shirt. He also wore bloused black boots and red suspenders. I would have laughed out loud had it not been for the rifle slung under him arm so I could see the curved magazine. I know the old stuff 'cause my dad once had a sporting goods store, but the new ones confuse me with their Polish names. Anyway, it was the kind Arab terrorists always have. "State your business," he said as I noted a button saying "W.A.R." on his suspenders. Maybe some sort of reenactment? I told him I was a friend of Frank's and he confirmed it on a walkie talkie and waved me on. Again I suppressed a laugh. The handheld said "Archer Space Patrol" on it.

"Doing a double load of laundry?" I asked Frank after negotiating two more Space Patrols and a Minnie Mouse Fun Mic. "Leecher wires," Frank said of the parallel clotheslines he was adjusting between the bed of a Federal truck and a tree. A 10-foot folded dipole of welding rod fed with matching twinlead was screwed to a 4X4 above the Federal's cab. He greeted me warmly to their "Field Day" operation, saying he fell out with the CBers over plate modulation but that these young patriots, while they had some strange ideas, were really interested in emergency communication.

"But Field Day is in June," I objected.

"That one is for dipsomaniacs and appliance operators," he retorted, as one of the W.A.R. persons pulled the cord of an ancient engine that said "Lincoln" on it and a big surplus generator whined. Frank began adjusting the rig, the rest of his remarks obliterated by the noise. I had seen an 8877 before, but never on a breadboard. There was some sort of blower below the plywood I would have asked about, but Frank drew a spark from a coil of half-inch tubing with a pencil. It was about another half inch that the fire leaped to the appropriately named "Big Mo."

"Looks good," he shouted as he slipped a loop of red TV picture tube wire into the coil. The other end was attached to a plastic box adorned with lambs and ducklings and saying "Sleepy time Sentinel." A baby monitor transmitter, I thought as Frank, with his other hand, withdrew a watch, opened it, and counted off the seconds. He then told the ducklings "Able leader, this is Final Hour." I could see he was reading from a card held by one of the W.A.R. guys, but before I could read the inscription he pulled out the 'monitor and every walkie talkie in the meadow answered: "Final Hour, you are loud and clear. The Eagle is gathering its wings." A cheer broke out and one of the W.A.R.s shorted the plug on the motor with a banana-shaped clip. There was much congratulating but finally they settled down to Mountain Dew soft drinks.

Being tea total I wondered if they were somehow attached to the Texas Baptists.

"Where is Able Leader?" I asked.

"Sonoma," Frank said, and I gasped. "How in the world did you reach California from Texas on a self-excited oscillator modulated by a baby monitor and using Super-Regenerative receivers?"

"Well," grinned Frank, "Some of these young persons are in the military and one of them outside Santa Fe just happened to turn on the over-the-horizon radar for a moment or two. "It really heated up the E layer--just like '58."

The W.A.R. bunch was cordial throughout, but made it clear that the rest of the evening would be devoted to "marksmanship," so I took my leave. Walking past Frank's Frasier my eye caught the telltale side loading port of a Krag-Jorgenson rifle. The U.S. quit using those in 1906 and I have no idea where Frank acquired one

73 de ab5L, michael in Dallas, student of Six Meters' Golden Age, 1957-58, and two of its jewels: Tecraft and International Crystal ham products. Michael N. Hopkins
Box 226841

Dallas, TX 75222 MNHopkins@Juno.com

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Date: Sun, 20 Sep 1998 22:37:50 -0400
From: THE ONE AND ONLY <mitch96@pobox.com>
To: Qrp-l@lehigh.edu
Subject: [20594] daytona florida hamfest
Message-ID: <3605BBFE.6421@pobox.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi gang,
question.....any florida hams going to the hamfest in daytona this
saturday? embryo riddle aeronautical and daytona beach ars is doing a
joint effort ham shebang. never been, and im curious to see daytona sans
motocycles. im gonna drive up from down here in hollyweird.if anyone is
going,give me a holler and we can hook up. hopefully this "blow" in the
carribean wont ruin my day.

Mitch, Ww4mL

Date: Sun, 20 Sep 1998 23:02:07 -0400
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: //QRP-L Discussion Group <QRP-L@lehigh.edu>, "+Doc W.D. Lindsey/K0EVZ"
<70511.3041@compuserve.com>
Subject: [20595] Not QRP:NYC Marathon Question
Message-ID: <199809202303_MC2-5A09-6C66@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline
Content-Transfer-Encoding: 7bit

Gang:

Pardon the BW....but I hope someone might answer the following query.
Does anyone happen to know the *route* for the NYC Marathon? I ran it in
1989, but have lost all materials/notes from the event. Am writing
memoirs and badly need the info. This would include the names in
sequence of the bridges crossed.

This is a way long shot, probably. But if someone can help, it would be
appreciated. Thanks in advance :-).

72/73,

--Doc Lindsey/K0EVZ Rochester, MN--Home of the Mayo Clinic.
MWBC
519-16th Street SE
Rochester, MN 55904
507/289-5108 (eves)

Date: Sun, 20 Sep 1998 23:29:35 -0400
From: Tracy@bytemark.com (Tracy)
To: "QRP-L" <qrp-l@lehigh.edu>, <turnkey@exo.com>
Subject: [20596] RE: How do you cut copper clad PC board?
Message-ID: <000301bde510\$0e3f2a60\$b8751ad1@titan>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I personally like a Jig saw. Use a fairly fine, but not too fine, blade and
it will last a long time. (several years and hundreds of boards for me.)

You can 'score and break' PC boards. This is not a real 'neat' method, but
works if the board material is brittle enough. You have to score the copper
pretty deep, though.

I've also been known to take my boards down to a local print shop that has
an old, worn-out paper cutter blade. They have this wonderful hydraulic
press that will cut anything. They keep the old blades around for cutting
'junk' for their sign shop.

If there's a metal shop anywhere around, they will usually cut boards for a
reasonable cost. I've used one down in Taft (a rail city, we acronym their
city 'Train After Freakin' Train' ...) that will cut a couple dozen for me
for about \$10. I use them when I need precision cuts. Some local high-school
shop teachers will let you drop off boards for students to practice on.

For thin boards, a desktop paper cutter can be used. I've seen these at school surplus sales for under \$20. Wish I had picked one up when I had the chance. I know a fellow who says it works just fine, but he does say he sharpens the blade frequently.

Those Ronco \$19.95 Knife Specials that come with the scizzors that cut nails work great also. You can find this stuff at Wall-Mart and other places.

Use your imagination and observation skills. There are lots of things you can employ to cut boards.

Tracy N4LGH
QRP-L #1453

> What is a good way to cut copper clad PC board (to use
> in making an enclosure for an attenuator)?

Date: Sun, 20 Sep 1998 22:51:26 -0500 (CDT)
From: aweiss@usd.edu (A. Weiss)
To: qrp-l@lehigh.edu
Subject: [20597] RE: RX Noise Bridges - Did you know...
Message-ID: <199809210351.WAA12436@sunburst.usd.edu>

OK Gang -- lissen-up!!!!
Rich is on to something here!

The RX bridge is the only common instrument that will actually reveal the secrets of your antenna system.

So, go ahead Rich!

72, ADe W0RSP

Date: Sun, 20 Sep 1998 22:08:59 +0000
From: Patrick Cook <kb0oxd@qsl.net>
To: nop@swbell.net, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [20598] Re: 10 Mtr AM Repeater
Message-ID: <199809210406.WAA17236@indy.power-online.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi everyone:

At 03:02 AM 9/19/98 -0500, Randy Jouett wrote:

>Ok. The time has arrived for a 10-mtr AM repeater via 220 remote link.
>First of all, is there anyone already doing this? If not, can we do this
in the
>10-mtr AM section of the band? If not, is there enough spectrum available
>above 29.6?? Also, how bad is the phase distortion on 10?

snip...

>Have any old dust-collecting 220 stuff or CB Amps hanging around? I'd be
>glad to hack a repeater together if anyone is interested.
>
>
>What you guys think?

What about using 440 as well??? There's not as much traffic as there is on
two meters (and in some areas 220 as well) and 2/440 Dual-Banders are more
common than 220 Mhz. stuff.

Just a thought.... :-)

>73,

Patrick Cook, KB00XD (an admitted list-lurker)
kb00xd@qsl.net
Colorado QRP Club #215
Denver, Colorado

Date: Mon, 21 Sep 1998 00:36:41 -0400
From: mike czuhajewski <wa8mcq@erols.com>
To: QRP forum <qrp-l@Lehigh.EDU>
Cc: Mike Czuhajewski <wa8mcq@erols.com>
Subject: [20599] Re HW-8 cores
Message-ID: <3605D7D9.38F8@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Someone asked about HW-8 output networks and toroids, and someone told
him to look in the qrp-l archives under "articles" for an item called
badhw8cores.mcq. That "mcq" at the end is a little tag so I can tell

which articles are mine :-)

Look down the list a bit further for one called zapcores.mcq. It contains some related information on toroids and such, and details some experiments I did with some cores a few years ago.

--

73 and Queue Our Pea de WA8MCQ wa8mcq@erols.com

Date: Mon, 21 Sep 1998 02:30:35 EDT
From: RABRUNER@aol.com
To: BADDBadger@aol.com, qrp-1@Lehigh.EDU
Subject: [20600] Re: Am audio (overmod)
Message-ID: <3222d15f.3605f28b@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

In a message dated 9/20/98 5:07:13 PM Central Daylight Time,
BADDBadger@aol.com writes:

> I was testing a friend's homebrew Confederate KW (500 W) linear in SSB mode
> . . .
> the linear apparently broke into self-oscillation during the process.
> This rig was producing splatter . . . over 150 KHz from the carrier
frequency . . . it is better to use a dummy load than using an "unused"
channel for initial testing. . . . Then a simple test with a communications
receiver can be used to test the operation and bandwidth.

Amateur antennas at HF are usually more broadband than AM broadcast antennas,
and hence, likely to radiate more splatter. Most broadcast AM rigs are fed
through several high Q tuned matching circuits that severely limit the
bandwidth over which the transmitter is loaded. Directional AM stations, in
particular, often have trouble getting the antenna bandwidth (20kHz) to pass
10kHz audio response to the antenna. This is handy if you operate on only one
frequency, and have a 'dirty' signal. Amateurs feeding their rigs straight to
a resonant dipole or other antenna probably have anywhere from a 50kHz to
150kHz or more with a good enough match to the transmitter to radiate a lot of
hash if the rig is producing it.

A dummy load is a great maintenance tool and a real service to your neighbors.

Bob Bruner
WB4TAJ/9
Chicago

Date: Mon, 21 Sep 1998 03:51:34 EDT
From: RABRUNER@aol.com
To: qrp-1@Lehigh.EDU
Subject: [20601] Re: suppressed carrier FM
Message-ID: <4f343839.36060586@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

In a message dated 9/21/98 12:12:21 AM Central Daylight Time, neil@aade.com writes:

> I think you will find that you and the books are both right. FM has
> constant
> carrier amplitude and AM a variable carrier level
> your observations are in the frequency domain while the books are talking
> about the time domain representation of the same signal.

Neil,

I wish it were so, but it isn't. I have been working in the field of radio transmission, test and measurement for decades and, while I am not sure of much, I am certain that most elementary books on radio and electronics simply mislead folks as to how radio works. You are correct that you get a different picture when you look at a signal in the frequency domain and the amplitude domain, but since the two pictures are directly contradictory of one another, both cannot be correct. That is, an FM carrier cannot be both variable and constant at the same time, nor can an AM carrier.

I know what you are saying, we are all familiar with the oscilloscope picture of the 100% modulated AM signal which seems to clearly show carrier going to zero amplitude. You may have even seen that presentation on your own scope, hooked to your own rig, but what that presentation is showing you is the result of mixing three different signals. That is, you are seeing the vector sum of the upper sideband, the carrier, and the lower sideband. The three seem to cancel out when added together because they are mutually in phase quadrature. It is this phase offset that makes the carrier appear to "go away."

In this case the spectrum analyzer is the most revealing of the facts. If you view an AM signal thus, you will see that the carrier sits there and does nothing as the sidebands go up and down and in and out with modulation amplitude and frequency. The opposite is true with FM. The carrier goes from zero amplitude to 100% amplitude and all points in between depending on the modulation frequency and amplitude. The difference is that when you look at the signal in the frequency domain, you can see the carrier in isolation and see what it does without the influence of the other frequencies present on the signal. As I said in my original post, this fact of the disappearing carrier

is used in calibrating FM systems using Bessel functions everyday by somebody. Again if you look at the FM signal on a conventional oscilloscope, it will appear that there is a carrier there that remains constant in amplitude no matter what you do to the modulation -- unless you can trigger on the carrier frequency and hold trigger while the scope displays a few cycles of carrier frequency during modulation. Not many scopes can do this, and certainly your garden variety 50mHz to 100 mHz scopes won't, but a good 300 mHz or better scope with jitter free triggering will let you see the phenomenon, even in the amplitude domain. One older scope that will permit this is the Tektronix 485, but 465s and clones probably will not.

Broadcast AM modulation monitors used to have two required meters on them. One was, of course, "Per Cent of Modulation." The other was "Carrier Level." The first meter danced all over the place under modulation, the latter, in a transmitter of good design and well maintained, never flickered by more than a pointer width.

I agree with you that the facts are counter intuitive, especially after we have been told by people writing popular electronics books and magazines again and again that the opposite is true, but the physics are there and they just don't admit to any massaging. The writers of the beginner books don't want to get into vector plots and Bessel functions and Fourier transforms at that level, even if they had the space for them. They just whomp up a perfectly usable algorithm and get on with it. If the writers would just say that the "power" of an AM station varies with modulation and the "power" of an FM station is constant with modulation instead of sticking the word "carrier" in there, things would be OK, and people wouldn't have so much to unlearn. After all, you can do a perfectly good job of operating a radio with the simplified gospel -- that hour glass modulation envelope on the scope is a very handy way of observing your modulation percentage even if it isn't an objectively accurate picture of what is going on.

But most higher end books on single sideband devote at least half a chapter to undoing the AM case myth, because you have to get that picture of the pinch- waisted AM carrier out of your head if you are going to understand SSB. The whole rationale for SSB radio is that the carrier contributes nothing to the intelligence carried by the signal, other than a phase and frequency reference for recovering the audio. It just sucks up 4 times more power than the information bearing single sideband and can be dispensed with at no harm to the sideband as is demonstrated everyday by hundreds of thousands of amateurs around the world. If there were any variation on the AM carrier caused by the modulation, you wouldn't be able to just discard it. Another simplified way of looking at the AM modulation process is that it is a heterodyning process. The Audio and RF are 'injected' into the modulated stage, and the sum and difference sidebands are the output. The "carrier" is just the local oscillator signal that was used to mix the audio up to RF frequencies that is blowing through the mixer.

I hope seeing this from a couple of other angles helps make it clearer.

Bob Bruner
WB4TAJ

Chicago

Date: Mon, 21 Sep 1998 04:30:43 EDT
From: MJC191@aol.com
To: qrp-1@Lehigh.EDU
Subject: [20602] MFJ Reflector, Found!
Message-ID: <b08e0c8d.36060eb3@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi Folks,

Found at <http://www.qth.net>
Instructions following are quoted from the site:

=====

MFJ-AMERITRON is a mailing list (reflector) devoted to the discussion of radio equipment manufactured by MFJ Enterprises of Starkville, Ms and affiliates (Ameritron, Mirage, etc).

- * Amateur Radio Equipment
- * Multimode, Packet Data Controllers
- * HF and VHF Amplifiers
- * Accessories
- * QRP, VHF, Test Instruments
- * Buy, Sell
- * Anything MFJ Related

To join the mailing list, send email as follows:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe MFJ-AMERITRON

To be removed from the mailing list, send email as follows:

TO: majordomo@qth.net
SUBJECT:
BODY: unsubscribe MFJ-AMERITRON

To post to the mailing list, send email as follows:

TO: MFJ-AMERITRON@qth.net

This reflector is provided by Al Waller K3TKJ at no cost and I (K7ON) perform the routine administrivia.

Please contact me with any questions: k7on@qth.net

=====

Thanks for the tip!

Mike NA1XX / Weymouth MA
QRP-L # 1588

Date: Mon, 21 Sep 1998 01:43:14 -0700
From: Dave Fifield <fifield@pacbell.net>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [20603] RIT Range?
Message-ID: <360611A2.28D9@pacbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

What do people consider to be the ideal tuning range
for the RIT on a small QRP rig? +/- 2KHz, +/- 5KHz, more?
Let me know and I'll publish the results back to the list.

Why am I interested? Well, I'd like to please the most
people possible with the NC20 standard value....of course
you'll be able to modify it just by changing a single
resistor, so nobody should be too upset if their fave
value isn't the chosen one!

Please email me direct and let me know YOUR preference.
Please keep the emails short! Thanks.

Dave Fifield, AD6AY
fifield@pacbell.net

Date: Mon, 21 Sep 1998 04:42:47 -0500
From: "Dennis Payton" <dpayton@fwi.com>
To: <qrp-l@Lehigh.EDU>
Subject: [20604] Re: How do you cut copper clad PC board?
Message-ID: <000d01bde544\$31ddd3c0\$8cb054d1@Pdpayton>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I think a large pair (12") of tin snips works best. I just used them this weekend.

Using double stick tape to fasten the pattern or a piece of quadrille paper to the board will help in making a square cut.

Denny Payton, N9JXY
Auburn, IN

Date: Mon, 21 Sep 1998 06:47:00 -0400
From: Peter_Simpson@ne.3com.com
To: qrp-1@Lehigh.EDU
Subject: [20605] Book to read while waiting for K2
Message-ID: <85256686.003AB5ED.00@usboxmta.ne.3com.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

My son just picked up a book I think you guys will like.
It's "Rocket Boys: A Memoir", by Homer H Hickam, Jr.

About a kid growing up in backwoods WVa who decided to become a rocket experimenter. Good book. If these kids had discovered radios instead of rockets, they'd be QRPers.

Barnes & Noble has a synopsis on their web site at:
<<http://www.barnedandnoble.com/>>. Search on the title.

72,
Peter, KA1AXY

Date: Mon, 21 Sep 1998 07:09:10 -0400

From: "W. Kimura" <w.kimura@valley.net>
To: RABRUNER@aol.com
Cc: qrp-l@Lehigh.EDU
Subject: [20606] Re: suppressed carrier FM
Message-ID: <199809211109.HAA06821@orford.valley.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 03:51 AM 9/21/98 EDT, you wrote:

(snip)

>The whole rationale for SSB radio is that the carrier contributes
>nothing to the intelligence carried by the signal, other than a phase and
>frequency reference for recovering the audio. It just sucks up 4 times more
>power than the information bearing single sideband and can be dispensed with
>at no harm to the sideband as is demonstrated everyday by hundreds of
>thousands of amateurs around the world. If there were any variation on the AM
>carrier caused by the modulation, you wouldn't be able to just discard it.

(snip)

>Bob Bruner

>WB4TAJ

>Chicago

>

Therefore, could one say that SSB conserves power where a single sided
suppressed
deviation FM signal would conserve spectrum?

Kim Kimura, N1MVU

Date: Mon, 21 Sep 1998 08:32:47 EDT
From: SABorns@aol.com
To: qrp-l@Lehigh.EDU
Subject: [20607] F/S QRP Gear
Message-ID: <d64cf245.3606476f@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Gang,

The following items have been sold:

38S w Rainbow Tuner
OHR-Spirit 80m

Hands GQ-40

Items still for sale:

W9GR DSP-I \$50.00
OHR-Spirit 20m with KC-1 keyer/counter \$115.00

73, Steve K8IDN

Date: Mon, 21 Sep 1998 08:30:39 -0400
From: "Edward A Kwik jr" <eakwikjr@hti.com>
To: pharden@aoc.nrao.edu, "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [20608] Re: Solar Stuff for QRP AFIELD
Message-ID: <360646EF.D13C034B@hti.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Paul,
Your predictions were right on the money from here. Wanted to do 10 or 15 but they were dead. I have a power line noise problem that makes S7 buzz on 20 so that was out. Did 40 for the entire contest. Conditions were better early. I was expecting better conditions as darkness came on but nope.

Ed Kwik AB8DF qrp-1# 1444

Date: Mon, 21 Sep 1998 08:41:35 -0400
From: "Armin Hachmer" <armin@muskoka.com>
To: <fflynn@together.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [20609] Re: qrp rigs 4 sale
Message-ID: <199809211304.JAA05543@gold.muskoka.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Jerry Odell
Is your email working? Please send your phone number.
Armin Hachmer VE3TEQ
RR1, MacTier, Ontario, Canada, P0C 1H0

705-375-1600 armin@muskoka.com
' life is a contact sport '

Date: Mon, 21 Sep 1998 08:27:34 -0500
From: "Jeff M. Gold" <JGold@tntech.edu>
To: QRP-L #98 <qrp-l@Lehigh.EDU>
Subject: [20610] QRp/mobile and Yaesu 900AT
Message-ID: <001e01bde563\$97aa8620\$4d0b9595@Jeffro.cc.tntech.edu>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

All,

Finally managed to get the Yaesu 900AT mounted in my small LeBaron this weekend.. a bit of a challenge.

I believe that Yaesu's engineers where slightly high on Saki when they designed the rig. The rig itself works GREAT both on CW and SSB.. in fact I think I like it a lot better on CW than my 570D. The problem is using the remote mount mobile. Part, yes only part of the controls come off with the remote mounting head, and then there is no way to get to them from computer control.. you have to go to the radio. Controls include, VOX, power level, mike gain, direct freq entry, cw speed, cw breakin and a few more. At first I wondered about the VOX. You have to have it on to use CW and thought you had to have it off for SSB. Turns out you can just set the gain and the anti-trip so the VOX never becomes an issue in SSB. I still would like to be able to get to mike gain, and more importantly CW speed and Power.

Well other than that.. the rig is working great on SSB. too late yesterday evening I figured out you need to get to the key jack on the radio and run a long wire to front of car.. ran out of wire.. so just have SSB.. had a blast on my 7 mile run to work.. explained what Internet Buddy list and chat rooms are about to some older hams... Since I almost never operate SSB, kinda fun talking like I am on a repeater, but the guys are spread out all over the country.

72
Jeff, AC4HF

Date: Mon, 21 Sep 1998 08:45:25 -0500
From: nilsbull@juno.com (Nils R Young)
To: QRP-L@Lehigh.EDU
Subject: [20611] The SAC contest & many small boxes of stuff
Message-ID: <19980921.084535.9774.0.nilsbull@juno.com>

Gang,

I had great plans of getting into the SAC (Scandinavian Activity Contest) this year but two things stood in my way.
The contest was scheduled for 19-20 September. Cindy's birthday was Friday, the 18th. And I still had half an antenna tuner blown to bits on the bench in the "main station" outhouse.

But I did have the radio on. I listened to the bad conditions on 15m on Saturday (or at least part of it) and the better conditions (and activity on 15) on Sunday (or at least part of it), all while I was trying to push all the parts for the tuner into a tiny box.

So, the tuner . . .

If you've ever seen the many versions of the Z-match, you know that the coil is center tapped to ground and that the capacitors float above ground. Which means that you have to float two caps in plastic or ceramic stand offs or some other arcane way of making it work. Which I was set up for. At least until I found Robert van der Zaal (PA3BHK)'s circuit in Sprat #87 (pg 14/15).

Robert's circuit uses three caps, one a split stator, with the rotor/frame grounded. The center tap on the coil moves to a lower point and is connected to the transmitter/input hole by a capacitor. A 2P2T toggle switch changes two ranges of tuning (3.5-10 & 10-30 MHz). So, since I was shooting for the one-knob transmatch, I tried it without the input cap. Almost worked.

I thought about rewinding the coil so that I could vary the input tap for bands, but didn't feel that inspired. I got one of the little plastic broadcast caps that I'd gotten from Roger's House of Midwest Surplus Electronics and hosed it into the circuit.

That worked fine. Every stupid antenna I had (stupid 'cause I put 'em up) worked and tuned with the deal. So I built the one-LED tune up indicator circuit that's in the most recent QQ & a couple other places as well and ended up (after much cussin' & choppin' & hammerin' & drillin' & punchin' & cussin' &c) with a two-knob, two switch antenna tuner that is only

slightly bigger than the Sierra. Maybe I'll put a pincher of it on my web page

The contest? Well, it died out a couple times. I went to the Springfield Antique Flea Smarket with Cindy & looked at a lot of stuff I didn't need. One guy had a Bunnel key & sounder on a board (with numbers & everything as if it were the real item) for \$85. I didn't buy it 'cause I'm savin' for a new radio. The number of old cathedral or whatever they're called radios in the 1930-1950s vintage range was few. What there was was expensive. And flint-lock muzzle loaders, wicker chairs, felt elvises, road signs, Coca-Cola memorabilia.

And the SAC.

Maybe next year. I might have antennas by then. And a new radio.

73

Nils

Nils R. Bull Young
La Estancia de los Guajolotes Sonrientes :: The Grinnin' Turkey Ranch
WB8IJN &c :: The Tagalong Press :: email to: nilsbull@juno.com
<http://www.geocities.com/Athens/Olympus/9172>

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sat, 19 Sep 1998 15:14:18 -0600
From: Brad Mugleston <bmug@gwl.com>
To: "'qrp-l'" <qrp-l@Lehigh.EDU>
Subject: [20612] Novice Fox Hunt Tails
Message-ID: <01BDE532.B8C3B100.bmug@gwl.com>

Reading the Digest I saw where Joe suggested we share our "Great Moments in Fox Hunting" with the group.

I had the opportunity to be a NOVICE FOX a few seasons ago - I'll tell ya it was fantastic. So if your even thinking of being a FOX go for it, what you say you can't operate at 500 WPM, you've never operated in a contest, you station consists of a 2 watt home brew rig feeding a zip wire dipole.

Never fear, the FOX contest is just for you. You will have some of the greatest HAMS wanting to work you, at any speed.

Let me tell you about my first time as a fox.

I got all set before my scheduled time (OK it was an hour early). My palms sweated so much my key was shorting out from the moisture running down the key.

The appointed hour came and I sent out my call, all of a sudden the dead bands were a live with noise - I thought my daughter had just started up her hair dryer!!! Then I listened, they were calls all coming my way. I picked one out and called back, the noise died and I sent my exchange (I'd been practicing all week). His exchange came back, once, twice, three times (all in response to my request for a repeat). No sweat, I got it copied. I sent QRZ? and the noise started up again.

It was great, 10 minutes later (it was really 2 hours) it was over, I did my happy dance. Ran up the stairs and told my wife and did another happy dance.

I danced with my kids. I danced with the dog. The cat took off when I looked at it. I would have gotten into my fish tank and danced with my fish but the salt hurts my eyes.

So, if you think you want to be a fox OR if you would just like to work one, do it. you won't regret it.

de KB0ROL, Brad

Date: Mon, 21 Sep 1998 10:00:59 -0400
From: Scott Howell <whowell@hq.nasa.gov>
To: qrp-1@Lehigh.EDU
Subject: [20613] number for Alpha Delta
Message-ID: <3.0.5.32.19980921100059.0081f100@mail.hq.nasa.gov>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

anyone ahve a number or web addr. for Alpha Delta?
tia es 72/73 de n3byy

Date: Mon, 21 Sep 1998 09:05:39 -0500
From: "Jeff M. Gold" <JGold@tntech.edu>
To: QRP-L #98 <qrp-1@Lehigh.EDU>

Subject: [20614] Norcal 40A/KC1/Speaker 4 sale
Message-ID: <00ff01bde568\$e9dee3a0\$4d0b9595@Jeffro.cc.tntech.edu>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

I am considering selling my Norcal 40A with built in KC1, has speaker built into top of case, also has the 10 turn pot mod to make tuning easier. Works GREAT!!! Need to get my cash ready for next purpose, having my yearly clean shack sale.

72
Jeff, AC4HF

Date: Mon, 21 Sep 1998 08:57:25 PDT
From: "DJ Rock" <b2bn@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [20615] Wacky Skip
Message-ID: <19980921155725.13826.qmail@hotmail.com>
Content-Type: text/plain

I was talking to an Ex military buddy of mine the other day about the phenomenal propagation paths that can happen sometime. He told me this story about how he was 'talking down' a load suspended from a Chinook at his support base in South America(dea drug support) with a HT and that he was cut off by traffic cops in South Carolina, Listening closer he could tell it was from Charelston, his home town!, he responded and was heard on the other end, he said they were able to exchange a brief chat about the town and such and then the link just faded out.

Also today Ive been hearing a some Austrailian broadcasts in the 13 meter band loud and clear, inside with a Portable shortwave reciever with a Telescopic whip and a short length of wire. I bet 15 is open that way.

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Mon, 21 Sep 1998 12:00:26 EDT
From: Blackpug1@aol.com
To: qrp-1@Lehigh.EDU

Subject: [20616] WV Rocket Boy
Message-ID: <b4b6fa01.3606781a@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

I accidentally deleted the email item about the memoir of Hickman and rockets.
Could somebody please post that again?

Thanks.

Michael
KBORIA

Date: Mon, 21 Sep 1998 12:05:08 -0400
From: "Edward A Kwik jr" <eakwikjr@hti.com>
To: Bensondj@aol.com, "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [20617] 'QRP Afield'- Reporting
Message-ID: <36067934.F30955BF@hti.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

AB8DF
Ed Kwik
1580 Larchmont Ave
Waterford, MI 48328

I had a great time with the contest. I had to work with a new call and that messed me up a couple of times. I used my SW40+ at 2 watts. The antenna was a 105 foot dipole at 40 feet center fed with window line to a MFJ 971 tuner in the shack. Operated in the home category from Waterford, MI. All contacts were on 40 meters. At the start 10 and 15 seemed dead so I stuck to 40 thinking conditions would improve as it got dark. They really didn't. Detroit Edison says they are going to look at my power line qrn today. Last weekend I found two poles in the neighborhood that would make a walkman type radio go crazy on AM BC band. That seems to have got them interested. Thanks for the great time.

18:00	CALL	S/R	S/P/C	NR/PWR
15	VE3QDR	559/469	ONT	2W
20	WA8VTD	599579	MI	3W

30	NY3A	559/559	PA	002	
33	WB9NFD	559/569	IN	5W	
36	VE3VA	229/589	ON	3W	
39	W2WWP	229/559	NY	5W	
44	K8GZ	559/579	OH	1W	
48	KB8IDW	559/339	VA	100W	
51	N8WVD	559/599	MI	2W	
19:00					
13	WK8S	599/559	MI	95MW	
15	NW8U	599/599	WV	5W	
17	KI0AF	559/559	IA	3W	
23	NZ4E	339/339	VA	5W	
27	W8VEL	559/229	OH	75W	
36	N2QC	339/569	NJ	3W	THEN UP TO 599 TO THE END
41	NA3V	559/569	PA	5W	
43	KN8DMK	559/579	OH	1W	
47	K8CV	559/559	MI	5W	
49	VE3SP/M	559/569	ON	4W	
59	K4JSI	559/559	MD	4W	
59	W3MWY	449/459	OH	4W	
20:00					
01	K8JV	599/599	MI	5W	
12	AA3LY	339/539	PA	900MW	
24	N2PH	229/559	NJ	5W	
33	W8TIM	559/579	MI	900MW	
34	AB8CR	559/578	WV	10W	
21:00					
08	VE3JC/M	339/559	ON	5W	
11	KW3U	559/559	PA	5W	
14	WA8RXI	599/599	MI	4W	
23	VE3EGG	599/599	ON	90W	
25	AC4W	599/559	NY	5W	
27	N2CQ	559/599	NJ	5W	
42	W2KJ	559/559	NC	5W	
46	KG2H	559/559	NY	2W	
22:00					
28	K2UD	559/559	NY	447	
23:00					
17	N8EAG	559/579	WV	4W	
22	N3ROA	339/439	VA	5W	
23	VE3ELA	559/579	ON	3W	
35	KG8YT	599/589	MI	2W	
44	N2TLV	599/579	NY	5W	
47	KC1DI	559/559	ME	4W	
51	KB9KT	559/559	IL	2W	
59	W3ZVT	599/579	PA	5W	

Score = qso's x category x pwr x spc

Score = $43 \times 2 \times 2 \times 13 = 2,236$

Date: Mon, 21 Sep 1998 12:17:40 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-1@Lehigh.EDU>
Subject: [20618] TNX!! W6ZH es N7VE, the SWR bridge is amazing! (long)
Message-ID: <Pine.LNX.3.93.980921112046.2301A-100000@dns>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I felt "inspired" last night after rereading W6ZH's ZM-40 article in QQ. Not that I wanted to build the entire tuner, (someday soon though) but the N7VE bridge was just what I needed for my trip to Disney later this week. I have a "beater" HFT-9 (also a pretty one for the HW-9) and was looking at all the junk I was packing to take with me. The SWR meter was half as big as the rig! The WM-1 was just too big! So if I could stuff this N7VE thingie in the HFT-9 I'd be all set.

Took a quick inventory of my junk box, no FT-37-61... ah hah! FT-50-61. No #28 wire, #26 will have to do. Resistors, yes... 1N34A, yes... cap, 1K, clear LED, switch... lets go! The tuner I have already had a hole drilled in the back for reasons unknown, (remember its beat) so the switch would have to go there. I wanted LED in the front, so a new hole, but where? Dot the "I" in Heathkit? Cute but not mechanically practical. I settled for the upper left front corner.

The resistors (paralled 1W 100's) hang in between the switch and a ground lug, as does the transformer. The LED has the diode, cap, and resistor soldered to it. In between them is 6" of "phone" wire. I tested the bridge without the wire so I knew it would work, and worse case I'd have to put the LED in the back. With all the RF bouncing around in a tuner I wasn't sure how 6" of "feed line" inside there would be affected.

The short story (why is this always at the end:) it works! It works really really really well! I ended up with 26 turns on the LED side of the transformer, so the wires would come out on the "right" side, and some serious *globs* of hot melt glue to hold the mess in place. I thought the extra wire inside a tuner would be a problem, but the N7VE bridge seems to be very forgiving. Hey, I used completely different part and it still works:) I tuned up a folded dipole cut for 20 (had used the same tuner and a MFJ-259 before) and got the same result with the N7VE circuit. At "minimum" glow, with 2W in, the SWR is equal to about a needle width above 1:1 on the 259, and at "half" glow, the 259 shows less than 1.5:1, I couldn't ask for more. Works at 1W too, but just a little less sensitive. Minimum glow is about 1.1:1 at 1W :)

So, if you want to build something extremely useful, and don't want to do a lot of math (the "run whatcha' brung" attitude) this would be it! All this was done at 7Mhz (or Mc) with my OHR Sprint II with the internal gel cell and keyer. So now I have a travel station that will fit in a 7" cube! (less than 350 cu. in.) So if you hear N3XRV/4 gimme' a yell, not sure when the kids will let me play radio, so no skeds.

And while I'm at it, and words of advice on getting my "spy radio" through the airport as carry on? I'm not taking any chances on this puppy taking a vacation in Bermuda, while I'm in FL:) Although Georges might visit FL while I'm there too. I can give Hurricane reports even if the power goes out...

72 tnx all

```
-- Chris Cartwright,   Technical Engineer   |   ccart@vidtel.com   --
-- N3XRV      ARRL-VE   Norcal Zombie #163   |   Gaithersburg, MD FM19je   --
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --
```

Date: Mon, 21 Sep 1998 11:15:02 -0500
From: "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [20619] RE: Wacky Skip
Message-ID: <19980921161451171.AAA294@muenzlerk>

15 meters can be really awesome when it's open! I can remember times back in 1980 when I was able to hear New Zealand and Australian stations direct and longpath. Nice echo effect. Usually just one echo but I can remember once hearing a double echo
-- his direct signal and two echoes!

Kevin, WB5RUE

> -----Original Message-----
> From: owner-qrp-l@Lehigh.EDU
> [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of
> DJ Rock
> Sent: Monday, September 21, 1998 10:57 AM
> To: Low Power Amateur Radio Discussion
> Subject: Wacky Skip

>
>
> I was talking to an Ex military buddy of mine the other day about the
> phenomenal propagation paths that can happen sometime. He
> told me this
> story about how he was 'talking down' a load suspended from a
> Chinook at
> his support base in South America(dea drug support) with a HT
> and that
> he was cut off by traffic cops in South Carolina, Listening closer he
> could tell it was from Charelstun, his home town!, he
> responded and was
> heard on the other end, he said they were able to exchange a
> brief chat
> about the town and such and then the link just faded out.
> Also today Ive been hearing a some Austrailian broadcasts in the 13
> meter band loud and clear, inside with a Portable shortwave reciever
> with a Telescopic whip and a short length of wire. I bet 15
> is open that
> way.
>
>
> -----
> Get Your Private, Free Email at <http://www.hotmail.com>
>
>

Date: Mon, 21 Sep 1998 12:30:12 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@Lehigh.EDU, nwq-1@scn.org
Subject: [20620] WIAW PROPAGATION RPT
Message-ID: <a24e9d12.36067f14@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

The recent and anticipated solar activity according to WIAW report should have
the solar index over 150 by the 28th.
Alan KB7MBI

Date: Mon, 21 Sep 1998 10:12:33 -0700
From: "Allan (Grant) Taylor" <k7gt@qsl.net>
To: qrp-1@Lehigh.EDU, w1hijcw@aol.com
Cc: k7gt@qsl.net
Subject: [20621] QRP Afield / Yosemite backpack report
Message-ID: <36068901.1E46@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Greetings all

The Yosemite backpack trip was a blast and more success than learning experience this time.

Set up camp , antennas , and details and got on the air at 5PM PDT Friday. First QSO out of the box was EA7AHA, getting a 529 report. Lots of other fun QSOs on 20 until about 7:30 local when signals seemed to weaken (apparently including ours!). Did manage to work UA6LAM, though. Inadvertently crashed the YL contest...Sorry, Lia. Went to 40 and had a weak QSO just over the hill into Porterville CA. Tried to QSO with WE6W at about 10PM but got a 119 report with no call sign received. (By this time I was operating in the little tent and in the down wonder) .Back to 20: about 11 the Pacific starting coming in nicely but I couldn't raise anyone. Off until 6AM.

`Next morning, worked DS5USH and then JR5FAF (on 40 with the NorCal 40A at 2W) for 3rd and 4th new DXCC countries QRP. Tried and tried to break the BT2HC pileup to no avail. I did get someone asking me to move up a bit. I was hedging closer to the BT2 than most of the pileup in the hopes of being heard.

About 8AM worked WE6W, now both of us were 599! After breakfast, worked through the WSN QRP net and was able to relay in 3 of the 12 stations checking in for the session. Incredible hearing up there. The weakest checking in was S5 and at times W6SIY was 20 over and completely overloading the NC40A until I cranked the RF gain down to nil.

After an early lunch, began the QRP Afield proper. Worked everyone possible on 40 by about 1835. A non-contest QSO brought a report of chirp (indicating battery voltage problems). At about the same time, N6RY (the other op) reported that the MFJ rig was having a funny sidetone sound (more battery problems). So, I experimented to find that the MFJ would be ok as long as the transmissions were kept to no longer than about 15 seconds. Managed to work 6 QRP Afield stations that way on 20. Couldn't call CQ, though, as the rig would start gasping again.

I put the big battery pack from the MFJ setup on the NC40A, finding that it worked fine, and invited N6RY to see if he could generate some action on 40, the only viable option for us at that point. 15 minutes of CQing and listening brought nil (this is about NOON local time). So.. we pulled the plug and broke camp.

In summary, the trip was a great first true backpack QRP radio venture. Our side was splendidly beautiful, mosquitoes weren't all that vicious, no bears came sniffing through camp, and the sunset views while operating Friday night were magnificent. The morning was also splendid, with casual operating before the contest reclining against a Yosemite granite boulder.

Our location, of course, was just west of Harden Lake, on the south rim of the Tuolumne River canyon, elevation 7630'. Grid loc DM07dv. Tuolumne county and in that rare state of California. 5km from the trailhead and no more than 350 ft elevation gain either way.

Equipment: NC40A (stock at 2W) and MFJ 9020 (~5W with 15V pack)
two dipoles at 25-30' in the fir trees, 10 D cell pack and 8 AA cell pack, one homebrew plexiglas paddle and a Vibroplex Brass Racer.

I would really appreciate accurate QTH info on the stations I worked during the QRP Afield that weren't at their home QTHs.

40m contacts:	KN6YD/m	WE6W	K6UIZ	K6RPN	N6WG (loud)
	WA6NAE	WD7Y	W6JHQ		and dropin W6VYM (100W)

20m contacts:	KG5N	W0CQC	W4ED	W0UFO	WA8RXI and KB7MBI
---------------	------	-------	------	-------	-------------------

Total contacts, before and during QRP Afield, 48, as K7GT/p

--

73 de K7GT

Allan Taylor (a.k.a. Grant) Pleasanton CA

email: k7gt@qsl.net

web page: <http://www.qsl.net/k7gt/index.html>

Date: Mon, 21 Sep 1998 10:26:26 -0700 (PDT)
From: Stephen Lee <slee@u.washington.edu>
To: Peter_Simpson@ne.3com.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [20622] Re: Book to read while waiting for K2
Message-ID: <Pine.A41.3.95b.980921100400.100914A-1000000@homer34.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Funny how one good book leads to another...On the same subject there is a biography authored by Iris Chang titled: "Thread of the Silkworm." It's about a young man from China, born to a family of wealth by means of the silk trade, who becomes perhaps the premiere theoretical mathematician in all of China. Under the Boxer Rebellion scholarship program he attends university in the US. Goes on to become a founding member of the Jet Propulsion Lab and serves briefly as an officer in the US Army after WWII perusing the German rocket program. During the days of the McCarthy era this man, Tsien Hsue Shen, was branded a communist so he left the US and went back to China. There he developed the Chinese missile program and named it Silkworm. Tsien Hsue Shen also had problems with covenants!!!! It's a most enlightening book, 329 pages, US library call number:
TL781.85.T836 C49 1995

Enjoy! de AB7HI, Stephen Lee, Federal Way, WA

Date: Mon, 21 Sep 1998 09:22:32
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-1@Lehigh.EDU
Subject: [20623] Re: How do you cut copper clad PC board?
Message-ID: <3.0.3.16.19980921092232.11efb23a@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>What is a good way to cut copper clad PC board (to use
>in making an enclosure for an attenuator)?
>
Sawing is too messy for me. Makes too much fiberglass dust.

Tin snips for short pieces, score and snap for bigger cuts.

I use a 12" metal "T" square for a straight edge and utility knife to score the board, score on both sides, then snap by placing the cut along the edge of the bench. Knife blade also dulls quickly, only good for a couple of cuts. I usually snap the tip of the blade off when it gets dull, can do this a couple of times before it gets too short.

Be carefull when drilling large holes (bigger than 1/8") in pcb stock. If the board is not secured, the drill will grab the board and spin it. I have scares to prove what happends when your not carefull :-(

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Mon, 21 Sep 1998 12:42:35 -0500
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
To: Benson Dave N1NG <bensondj@aol.com>
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [20624] QRP Afield Report--N6WG/QRPP
Message-ID: <95A8AD93C03DD2118BD300805FA79E74469B59@s-il02-g.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Dave:

Here's my QAF report. Overall I had a great time, once the antenna was up. Now that's a whole story in itself.

I hauled my setup into the park on my usual handcart--card table, chair, rig, tuner, battery, lunch, water, the whole bit for a nice outing. I decided to put up the antenna first, then set up the station at the end of the feed line. Here's where the going got a bit rough.

In my infinite wisdom, I brought a slingshot to help get my line over a branch. Small miscalculation, in that I expected the lead sinker to pull up the white nylon cord I was to use for antenna support. The slingshot just didn't have the oomph to do it. Now I understand why at FD we always use light fishing line first, then pull the support line up after.

Ok, plan B time. (As someone has said before, if Plan B were any good, it would have been Plan A). I tried swinging the weight around a few times and letting fly toward the branch I had in mind. Hmmm. Low, and very far to the left. Ok, try again. Same results. I'm letting go too late, I guess. So I turn to my right to correct and try again. Still same results.

Well, if one weight can't quite lift the line, let's put a second one on. Ok, now we're ready. A new cast and another miss. The next try completely missed the intended tree altogether and went into a tree on the other side of the road.

By this time, I'm talking to myself, muttering, surely there must be movie

in this somewhere. Got another idea, move up on the bank a bit and get a different angle on the throw. Ok, big swing and release.

Ladies and gentlemen, I can attest through personal experience that Newton was right about equal and opposite reactions. I threw so hard I overbalanced and tumbled down the bank. I got up, grumbling that this was counterproductive. Nothing was damaged but my dignity, so back to tossing fishing weights at my chosen tree. Finally got it over a lower branch than the one I really wanted, but by now, I've had it. Gotta get on the air.

Station setup went smooth at least. Had my old QRP++ and LDG autotuner. I used a very tight lowpass filter I've cobbled together and spliced into the QRP++ audio section before the SCAF filter. Sure made a difference in selectivity. The antenna was a 40m dipole up maybe 25 ft, but it matched ok on both 40m and 20m so I was happy. Used the wattmeter to set up for 950mw, and I was in business.

Spent most of my time on 40m (13 QSO) and 20m (22 QSO), and tried 15m occasionally. One contact there. Overall, 36 QSOs and 16 SPC. My score appears to be 9728 points if I've figured out your scoring procedure correctly. I feel pretty good about that, for a 950mw entry.

Thanks to Doc, K0EVZ, for hanging in there until we made a complete exchange of it. I did have a nice short contact with WK8S, also running 950mw. W0CQC was consistently loud all day. I see from their post they were running from a mobile setup. Amazing.

Anyway, I had a great time, and once my aching muscles recover, I'll be ready to go again.

72 to all,
Bob N6WG

Date: Mon, 21 Sep 1998 11:52:38 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: "Allan (Grant) Taylor" <k7gt@qsl.net>, qrp-1@Lehigh.EDU
Subject: [20625] Re: QRP Afield / Yosemite backpack report
Message-ID: <199809211752.LAA18887@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-Transfer-Encoding: 7BIT

Hi, Allan aka Grant--

>>I would really appreciate accurate QTH info on the stations
I worked
during the QRP Afield that weren't at their home QTHs.<<

W0CQC was at Daniels Park, about 20 miles south of
Denver, at an altitude of around 6000 ft.

Sounds like you had an interesting trip-- thanks for telling us
about it.

73
Marshall Emm
N1FN/VK5FN
n1fn@MorseX.com
Morse Express
"Everything for the Morse Enthusiast"
<http://www.MorseX.com>
(303)752-3382
--

Date: Mon, 21 Sep 1998 13:51:31 -0400
From: Ronald_A_Pfeiffer@res.raytheon.com
To: qrp-1@Lehigh.EDU
Subject: [20626] FS:TenTec Argosy II and accessories
Message-ID: <85256686.0061EDE9.00@ressud-as01.res.ray.com>
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii

#525 TenTec Argosy II with:
 #223A noiseblanker,
 #224 audio/cw filter,
 #220 2.4khz filter,
 #217 500hz cw filter
#234 Speech Processor
#225 matching power supply
#1125 Breaker equivalent
#222 mobile mount
#700A hand mike
#214 desk mike
#227 Tuner

This unit is pristine and have everything for mobile use
but unit was never installed for mobile. Some paint rubbed
off side of power supply otherwise all else excellent.

Asking \$700 or make offer for all above including manual plus shipping.

Ron - N1ZSW

Date: Mon, 21 Sep 1998 12:07:47 -0700
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [20627] Re: Radio Shack DX394 closeout
Message-ID: <0b0701bde593\$217b64d0\$140a0a0a@double_trouble.reliablemeters.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Update:

I took the receiver home on Friday, and played around the SW broadcast
bands with the built in 2 ft antenna. Works nicely. After setting
the clock with WWV at 10MHz, I tuned up to 30 meters and promptly
heard N0TFI calling CQ -- on the 2 ft collapsible whip! I reached for
the paddles and remembered, no transmitter. Oh well.

So Jess, you were 529 on a 2 ft antenna, 100% copy.

Mike K1MG

Date: Mon, 21 Sep 1998 14:26:03
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@Lehigh.EDU
Subject: [20628] Thermophotovoltaic power
Message-ID: <3.0.3.16.19980921142603.2d8fc93c@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Interesting article in the current Scientific America about a Thermophotovoltaic power source.

As the name implies, an infrared emitter is coupled to a photo cell to produce an electrical current. First conceived in the 50's, it is now just being engineered into a practical power source.

The trick was finding a suitable IR emitter and pn junction material that would work at a reasonable temperature. Although any heat source capable of raising the emitter to the proper temp can be used, (1000 C) propane or natural gas is the most practical fuel. Energy densities of up to 3-4 watts per square centimeter are possible, current prototypes deliver about 1 watt per sq cm. This is compared to 14 mw per sq cm for solar cells.

A significant amount of waste heat is still produced, which can be used to heat a room or keep water hot. A commercial unit will be marketed soon, designed to charge batteries on a small boat and supply cabin heat. Since it is designed for a marine environment, it will be expensive at \$3,000. Less expensive units supplying about 300 watts are expected later, for the RV market.

I want one, but when the price comes down :-)

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Mon, 21 Sep 1998 15:23:07 -0400
From: Scott Howell <whowell@hq.nasa.gov>
To: cw@qth.net
Cc: qrp-1@Lehigh.EDU
Subject: [20629] Hi-Mound BK100 bug for sale
Message-ID: <3.0.5.32.19980921152307.007f5800@mail.hq.nasa.gov>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have a Hi-Mound BK100 bug for \$100 shipped via UPS.
I have only had the bug for a few months, but decided that I would like to acquire some keys instead. So, if interested, please drop a note to me at whowell@mail.hq.nasa.gov

tnx es 72/73 de n3byy

Date: Mon, 21 Sep 1998 13:04:11 -0700
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: <qrp-l@Lehigh.EDU>
Subject: [20630] Elmer 101 Series in QRPP
Message-ID: <01bde59b\$00473480\$630a0d0a@doug.dpol.k12.ca.us>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Wow! I spent the entire weekend typing in new members and renewals for the fall issue of QRPP. We have had an increase in membership of 300!! thanks to the efforts of all the guys who worked on the Elmer 101 issue, Mike Maiorana, Chuck Adams, Paul Harden, Glen Leinweber, Mike Gipe, Bill Jones, Gary Surrency and Dave Benson. I had to call Paul and increase the order for copies. It is a good thing that I called when I did, because he is going to start printing tonight, and needs to order more paper.

This next issue will be devoted entirely to the Elmer 101 series that appeared here on QRP-L over several weeks last spring. I decided that it needed to be preserved in print, all in one place, so that it would be available in the future. Evidently a lot of you agree, as the response has been overwhelming. Thanks for the support, and the issue will be out in October, probably the latter part, as there is a ton of work to do for an 84 page issue. Paul has also promised an extra special cover that has never been done before, don't know what he has in mind, but he did say that it was necessary because of the size of this issue.

Here is the table of contents:

>From the Editor, page 2
 Doug Hendricks, KI6DS
Elmer 101: How it Started, page 3
 Doug Hendricks, KI6DS
Ordering Information for the SW40+
(Includes all specs, prices, etc. on the rig), pages 4-5
 Dave Benson, NN1G
The Elmer 101 Project: Building the SW40+, pages 6-70
 Mike Maiorana, Glen Leinweber, Chuck Adams, Dave Benson, Mike Gipe, Paul Harden, Bill Jones and Gary Surrency
Blue Printing the SW40+ and the SW30+, pages 70-74
 Gary Surrency, AB7MY
A Homebrew Enclosure for your SW40+ Rig, 74-82
 Bill Jones, KD7S

We have cut off the subscriptions for this issue, in order that we could give Paul an accurate count. The deadline was Sept. 15, and I hope that you got your name in time.

Thanks again to all involved, and I hope that you enjoy the issue. 72,
Doug, KI6DS

Date: Mon, 21 Sep 1998 13:07:21 PDT
From: "laura halliday" <marsgal42@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [20631] Bandwidth (was: re: AM Audio)
Message-ID: <19980921200722.17937.qmail@hotmail.com>
Content-Type: text/plain

Some of the discussion has mentioned minimizing bandwidth as a motivation for SSB - but is this really the goal? Or is it, rather, having the most communication possible in a given chunk of spectrum?

These two goals are not necessarily the same thing. Look at spread spectrum, for example...

Laura Halliday VE7LDH/3 "Que les nuages soient notre
Grid: FN03gs pied a terre..."
 - Hospital/Shafte

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Mon, 21 Sep 1998 13:48:03 -0700 (MST)
From: Chris Trask <ctrask@primenet.com>
To: laura halliday <marsgal42@hotmail.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [20632] Re: Bandwidth (was: re: AM Audio)
Message-ID: <Pine.BSI.3.96.980921134506.3774A-100000@usr02.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

To: qrp-1@Lehigh.EDU
Subject: [20633] PacifiCon '98
Message-ID: <4eb42167.3606be2a@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi Gang...

Has anyone tried the URL for PacifiCon lately? I have been trying today without much luck. The URL I have is:
PACIFICON '98 or
http://www.mdarc.org/pac98_1.html
but it doesn't work. System tells me that it can not resolve the address. I take that to mean that it isn't a good address.

TIA..

72 de Denny AD6EZ<><

Date: Mon, 21 Sep 1998 10:14 -0600
From: "Karl Kanalz - Dallas" <kkanalz@optelinc.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>, "RABRUNER" <RABRUNER@aol.com>
Subject: [20634] Re: Am audio (overmod)
Message-ID: <40690608@optelinc.com>

Currently, there is NO prohibition to using "Super Modulation" or "negative cycle loading" on the amateur bands. FCC regs DO require spectrum bandwidth conservation considerations, however.

AM'ers on say, 160M or 75M can indeed use "super modulation".

Karl K. - W8TIF
McKinney, TX

From: RABRUNER
To: Low Power Amateur Radio Discussion
Subject: Re: Am audio (overmod)
Date: Sunday, September 20, 1998 2:06PM
<snip>

As a practical matter, as far as amateur use is concerned, there has not been a rulemaking to allow super modulation on the hambands as far as I know,

and it is just not permitted -- even though it might be beneficial to some burgeoning AM QRPer.

73

Bob Bruner

WB4TAJ <snip>

Date: Mon, 21 Sep 1998 10:06 -0600
From: "Karl Kanalz - Dallas" <kkanalz@optelinc.com>
To: "James R. Duffey" <jamesd1@flash.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [20635] RE: PVC, Sideband FM, Narrow FM, and the Heath Dipper er
Message-ID: <0A9B3099@optelinc.com>

On Sunday, September 20, 1998 12:06PM, James wrote:

<snip>

Let's take up the subject of using PVC for insulators. Putting PVC in a microwave at 2000+ MHz won't tell you much about its performance at 7.040 MHz. If you want to do neat things in your microwave ... <snip>

Microwave testing of a material at 2465 MHz won't tell me any *specifics* of its performance at 7.040 MHz, but it WILL tell me whether or not it's useable (relative to other materials). I have yet to find a dielectric that works well at microwave frequencies that WON'T work well at forty meters!

<BIG snip>

FM topic number 2. There was some experimentation with very narrow FM by amateurs after WW2. The goal was to use a deviation that occupied a bandwidth less than or equal to the AM signals of the day, which was 6 kHz. It worked technically very well. It did not succeed for two reasons, <snip>

The FCC *DID* allow Narrow Band FM ("NBFM" on my Central Electronics 20A exciter) on bands below 30 MHz and I used to use it from time-to-time. In fact, the Collins 75A-2 and 75A-3 receivers had an accessory socket for an NBFM adaptor (but it was more usually used for an SSB product detector). NBFM did not succeed (in popularity), however, because it couldn't produce the S/N ratios afforded by SSB in a given receiver i.f. bandwidth, and most hams didn't have a proper detector for NBFM, choosing instead to "slope detect" the NBFM signal(s).

Karl K. - W8TIF
McKinney, Texas

Date: Mon, 21 Sep 1998 16:40:08 -0400
From: Al Gritzmacher <ae2t@bigfoot.com>
To: qrp-1@Lehigh.EDU
Subject: [20636] Solar contamination
Message-ID: <2.2.32.19980921204008.006de48c@localnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Bill K5ZTY wrote:

<<
Subject: [20296] Re: Solar Powered QRP - WARNING!
Message-ID: <19980917.023852.12254.1.k5zty@juno.com>

Thanks for the warning Alyn. I'm throwing my solar panel in the garbage right now before I am radiated any more.
Why didn't Mike Bryce tell me about this danger when I bought the Micro M controller from him?? I'm throwing it away too, it must be contaminated also. Hey, my OHR400 is probably ruined too. Oh my God, this may be the end of all of my ham gear. That panel has been setting in the same room with all of it. I'm calling the HAZMAT guys right now....

Bill, K5ZTY
Houston, TX
k5zty@juno.com
>>

Don't throw that good stuff away Bill. You can decontaminate it easily.

Just rinse it off in some DiHydrogen-MonOxide and the effects will be reversed!

Great stuff, that DHMO and available almost everywhere!

72/73

Al AE2T

Date: Mon, 21 Sep 1998 16:31:53 -0400

From: "Bob Kellogg" <ae4ic@nr.infi.net>
To: "qrpforum" <qrp-1@Lehigh.EDU>
Subject: [20637] Knightlites Website
Message-ID: <199809212059.QAA25098@mailhost.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Guys,

Last week I mentioned the Knightlites Website, and apparently gave the wrong address. The correct address is:
<http://www.waterw.com/~knights>

There is a lot of information on our KnightSMiTe project there, plus pictures of our expeditions to the Outer Banks and information on joining our club and/or reflector. In other words, it's a nice place to visit if you are interested in QRP activities.

CUL,
Bob Kellogg, AE4IC, Greensboro, NC
Prolably, but not nececelery. -- Benny Hill

Date: Mon, 21 Sep 1998 14:11:58 -0700
From: "Allan (Grant) Taylor" <k7gt@qsl.net>
To: qrp-1@Lehigh.EDU
Subject: [20638] HC49 crystals wanted:(1) 11.046 and (2 or so) ~11.030 MHz
Message-ID: <3606C11E.6CA7@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I need to find a 2nd main VXO frequency crystal for my 40m SST as well as an additional one for a range ~ 7018 - 7029. The standard crystal I need is 11.046 MHz and is available from Mouser. If anyone has a stray one, I would like to negotiate for it. The freq required for the lower range is ~11.030 MHz. This last one is likely not available as a std crystal (altho I don't have a Mouser catalog to check). Assuming that I will have to have it custom-ground, can someone suggest a suitable supplier for a custom crystal in HC49 case.

Operating over the weekend has clarified my needs for the SST/40 that I will be calling my 'extreme portable' rig. That is, I need to be able

to cover some general DX operating frequencies but not so far down as to get into serious DXpedition work. 7018 - 7029 or so should allow lots of JA QSOs from a suitable location.

Thanks in advance.

--

73 de K7GT

Allan Taylor (a.k.a. Grant) Pleasanton CA

email: k7gt@qsl.net

web page: <http://www.qsl.net/k7gt/index.html>

Date: Mon, 21 Sep 1998 13:06:40 -0600
From: tom whalen <whalen@swcp.com>
To: cnse97@lmpsil02.comm.mot.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [20639] Re: QRP Afield Report--N6WG/QRPP
Message-ID: <3606A3C0.557D@swcp.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Tellefsen Bob-CNSE97 wrote:

>
> Dave:
> Here's my QAF report. Overall I had a great time, once the antenna was up.
> Now that's a whole story in itself.
>
> I hauled my setup into the park on my usual handcart--card table, chair,
> rig, tuner, battery, lunch, water, the whole bit for a nice outing. I
> decided to put up the antenna first, then set up the station at the end of
> the feed line. Here's where the going got a bit rough.
>
> In my infinite wisdom, I brought a slingshot to help get my line over a
> branch. Small miscalculation, in that I expected the lead sinker to pull up
> the white nylon cord I was to use for antenna support. The slingshot just
> didn't have the oomph to do it. Now I understand why at FD we always use
> light fishing line first, then pull the support line up after.
>
> Ok, plan B time. (As someone has said before, if Plan B were any good, it
> would have been Plan A). I tried swinging the weight around a few times and
> letting fly toward the branch I had in mind. Hmmm. Low, and very far to
> the left. Ok, try again. Same results. I'm letting go too late, I guess.
> So I turn to my right to correct and try again. Still same results.
>

> Well, if one weight can't quite lift the line, let's put a second one on.
> Ok, now we're ready. A new cast and another miss. The next try completely
> missed the intended tree altogether and went into a tree on the other side
> of the road.
>
> By this time, I'm talking to myself, muttering, surely there must be movie
> in this somewhere. Got another idea, move up on the bank a bit and get a
> different angle on the throw. Ok, big swing and release.
>
> Ladies and gentlemen, I can attest through personal experience that Newton
> was right about equal and opposite reactions. I threw so hard I
> overbalanced and tumbled down the bank. I got up, grumbling that this was
> counterproductive. Nothing was damaged but my dignity, so back to tossing
> fishing weights at my chosen tree. Finally got it over a lower branch than
> the one I really wanted, but by now, I've had it. Gotta get on the air.
>
> Station setup went smooth at least. Had my old QRP++ and LDG autotuner. I
> used a very tight lowpass filter I've cobbled together and spliced into the
> QRP++ audio section before the SCAF filter. Sure made a difference in
> selectivity. The antenna was a 40m dipole up maybe 25 ft, but it matched ok
> on both 40m and 20m so I was happy. Used the wattmeter to set up for 950mw,
> and I was in business.
>
> Spent most of my time on 40m (13 QSO) and 20m (22 QSO), and tried 15m
> occasionally. One contact there. Overall, 36 QSOs and 16 SPC. My score
> appears to be 9728 points if I've figured out your scoring procedure
> correctly. I feel pretty good about that, for a 950mw entry.
>
> Thanks to Doc, K0EVZ, for hanging in there until we made a complete exchange
> of it. I did have a nice short contact with WK8S, also running 950mw.
> W0CQC was consistently loud all day. I see from their post they were
> running from a mobile setup. Amazing.
>
> Anyway, I had a great time, and once my aching muscles recover, I'll be
> ready to go again.
>
> 72 to all,
> Bob N6WG

Heck Bob, you should have asked me to borrow my spud gun antenna
launcher!!! One shot and your through. I enjoyed your story. I did not
get to get out for the contest due to work...72, Tom WB5QYT

Date: Mon, 21 Sep 1998 14:40:14 -0700 (PDT)
From: KC5TJA <kc5tja@axisinternet.com>

To: Karl Kanalz - Dallas <kkanalz@optelinc.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [20640] Re: Am audio (overmod)
Message-ID: <Pine.LNX.3.96.980921143951.31924B-100000@axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 21 Sep 1998, Karl Kanalz - Dallas wrote:

> Currently, there is NO prohibition to using "Super Modulation"
> or "negative cycle loading" on the amateur bands. FCC regs DO
> require spectrum bandwidth conservation considerations, however.
>
> AM'ers on say, 160M or 75M can indeed use "super modulation".

Please excuse my ignorance in this matter, but what is super modulation?
Thanks.

```
=====
      KC5TJA/6      |      -| TEAM DOLPHIN |-
      DM13         |      Samuel A. Falvo II
      QRP-L #1447   |      http://www.dolphin.openprojects.net
      Oceanside, CA |.....
```

Date: Mon, 21 Sep 1998 17:06:50 -0500
From: Guy Dragoo <GDRAG@proedge.com>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>,
"'heathkit@cyberventure.com'" <heathkit@cyberventure.com>,
"'heathkit@qth.net'" <heathkit@qth.net>
Subject: [20641] FS Heathkit HW-7
Message-ID: <117783A3E0F4D1119BCD006008AC9E5D7420@TPE_B01>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

HW-7 for sale. Appears to have final version upgrades from the Heathkit
factory (sticker from factory 10/22/79 inside) with a reverse polarity
protection diode....otherwise no changes or mods apparent. Works but case
has paint chipped and front tuning knob has a small nick...complete and
fully functional as far as I can tell. \$75.00 or best offer. See picture
at:

<http://www.proedge.com/guy/HeathHW-7.jpg>

Thanks and 73

Guy AC5HL

Date: Mon, 21 Sep 1998 18:07:41 -0400
From: w2bj@juno.com (Barry J Minsky)
To: cw@qth.net, forsale-swap@qth.net, qrp@qth.net, qrp-1@Lehigh.EDU, qrpp@qth.net
Subject: [20642] FS: SEVERAL ITEMS
Message-ID: <19980921.180745.-185803.0.w2bj@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I am clearing out my shack and have the following for sale:

1. TEN TEC Scout with 10, 15, 17, 20, 30, 40 and 80 meter modules.
Included also is the power supply and mic. It is in excellent condition
and has not been used much \$750.00
2. OHR Explorer 2 for 40 meters. Unit aligned by OHR. Excellent
condition \$70.00
3. OHR Explorer 2 for 30 meters. Unit aligned by OHR. Excellent
condition \$70.00
4. NorCal Cascade QRP 20/75 meter transceiver kit. Not built. \$160.00
5. St. Louis Tuner kit. Not built. I forgot what this sold for, so
make an offer.
6. 38 Special kit. Not built. \$30.00
7. SW-40+ kit with enclosure kit. Not built.
\$75.00
8. NorCal paddle kit. Not built. \$30.00
9. MFJ 9406 6 meter SSB Transceiver. This includes the CW adapter, but
that has not been installed.\$170.00
10. ICOM IC-2000 2 meter transceiver - New and never used \$180.00

Please add \$5.00 for shipping for each item.

I am selling these items to make room in my shack for new acquisitions.
I have other items that will be listed soon.

72/73,
Barry J. Minsky, W2BJ
ARRL, QRP ARCI #8871, NorCal #1560, QRP-L #1543, FISTS #2701,
Knightlites, Adventure Radio Society #359,
Six Club #151, Quarter Century Wireless Ass'n #29298, Old Old Timers
Club #3723
Amateur Radio Missionary Service

Date: Mon, 21 Sep 1998 15:27:46 -0700
From: Jim Lowman <jmlowman@ix.netcom.com>
To: turnkey@exo.com, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [20643] Re: Pacificon '98 - Sheraton room availability info
Message-ID: <3.0.32.19980921152744.006dbb84@popd.netcruiser>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 07:11 PM 9/18/98 -0700, Bob Painter wrote:
>Hi Gang,
>
>As of 6:53 pm Pacific time 9/18, here is the room situation at
>the Sheraton:
>
>Thursday night: block of 50 rooms, 24 are left
>Friday night block of 141 rooms, 22 are left
>Saturday night: block of 149 rooms, 33 are left
>
>Call the hotel directly at (925) 825-7700 because the
>800 number already thinks that Thursday night is sold out.
>
>Hope to see you there!

Hi, Bob. I put a note up here a while back, noting that the folks at the national reservation number for Sheraton don't have a clue as to what's going on. When I made reservations a few weeks ago, they tried to tell me that there were no rooms available for that period of time, except for a few rooms for disabled guests. Contacting the hotel reservations staff got the room for Thursday-Saturday with no problem.

72 de Jim - AD6CW

Date: Mon, 21 Sep 1998 18:46:09 EDT
From: BADDBadger@aol.com
To: qrp-1@Lehigh.EDU
Subject: [20644] Re: Am audio (overmod)
Message-ID: <570ee678.3606d731@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

In a message dated 9/21/98 5:49:36 PM, kc5tja@axisinternet.com writes:

>On Mon, 21 Sep 1998, Karl Kanalz - Dallas wrote:
>
>> Currently, there is NO prohibition to using "Super Modulation"
>> or "negative cycle loading" on the amateur bands. FCC regs D0
>> require spectrum bandwidth conservation considerations, however.
>>
>> AM'ers on say, 160M or 75M can indeed use "super modulation".
>
>Please excuse my ignorance in this matter, but what is super modulation?
>Thanks.

Super modulation is AM modulation (DSB unsuppressed carrier, usually) allowing asymmetrical modulation in excess of the equivalent of 100% modulation in the "positive direction." It is primarily used in commercial AM broadcasting where increased audio "punch" is achieved at the cost of slight added distortion. It is analogous to having a "sine" wave where the swing in one direction is larger than the other.

In high-level plate AM generation, the plate voltage applied to the final stage is the summation of a DC component (the unmodulated power supply voltage) and an audio component (from a high-level modulator). If the negative-going swing causes the instantaneous plate voltage to go too low (too much "negative" modulation), spurious sidebands are produced, causing "splatter or buckshot" and taking up excessive bandwidth and causing QRM to adjacent channels.

Conventional AM generation has a symmetrical modulation swing in both directions. The goal is 100% modulation. Supermodulation is a modulation scheme using an asymmetrical modulation swing of the plate voltage applied to the final stage. The maximum "negative" swing is set up to slightly less than the level where this splatter would otherwise be produced. However, the maximum "positive" modulation swing is allowed to be greater than the negative swing. This is referred to as modulation in excess of 100% in the positive direction. This allows a modulated output with increased power in the sidebands.

There are practical limits in how much supermodulation (overmodulation) to employ. The final stage has to be able to withstand the increased instantaneous plate voltage and the increased plate dissipation that occurs. Furthermore, the peak current capacity of the final stage has to be up to the task also.

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